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LIFE INSURANCE AND CARIOUS TEETH IN SEPTIC MOUTHS

And a Consideration of the Relation of This Condition to Life
Insurance Medical Examination

By ALONZO MILTON NODINE, D.D.S., New York City

FOREWORD

Life insurance medical examinations have one very weak link, a missing link, a consequential gap, namely, the consideration and appreciation of the fact, that diseased teeth and gums are the most considerable, constant, insistent menace to health to which an individual is exposed. They are a source of insidious infection in the individual and a dangerous depot for the dissemination of disease to others.

Life insurance has its history and its romance, its comedies and its tragedies. It has evolved from simple and ancient beginnings to one of the most complicated and advanced systematized business organizations of the day. The story of this evolution

is as interesting as a novel.

Beginning as it did, in the dawn of history, in Greece and Rome, we can trace its rise and expansion up through the centuries to the present day. The ancient mutual and fraternal orders cared for their sick and infirm members.¹ Some of these old guilds in addition to requiring their candidates to be holy, pious, good, also required them to be healthy.²

The oldest tables showing the "expectation of life" at different ages is one published by Ulpianus, the Praetorian prefect, in the year 364 A. D. The Romans of that day had a more accurate knowledge of the expectation of life then, than we find any evidence of any

other people possessing until the beginning of the 18th century.³

Anglo - Saxons organized societies for mutual protection and assistance. Some of the ancient English guilds provided for sick benefits, indemnity for fire losses, and relief from almost every calamity. During the latter part of the 17th century and the beginning of the 18th was the Golden Age of speculative insurance. In that period, we find forms of insurance of the most remarkable kind. One company was organized to insure against death from drinking Geneva! Another against highwaymen; another against divorce (might be popular now with the addition of an alimony clause commensurate with the premium paid); another, against loss of chastity (it would be interesting to know what the comparative premiums would be to men and women if such a policy were issued today); and another against lying, presumably slander.⁴

With these little illuminations, we will pass to the founding of the English Equitable Society in 1762. This company when issuing a policy, required a health certificate bearing the signatures of two witnesses, one of whom must be a physician. In 1779 an actuary suggested the need of a medical adviser. In 1820 the payment of commis-

sions to agents became a regular feature of the business, and its attendant dangers led to the employment of medical examiners. Urinary analysis was for years neglected. Even to this day a few companies demand it only in the event of a certain sum being applied for, or in the case of the applicant being above a certain age.⁵

There are two bases of selection of lives to be insured. The British and the American. The American companies insure almost wholly those only who are in good health. The British will insure many who are distinctly below the average in point of health, covering the increased risk by an added premium, or by an addition to the applicant's age, or by making early death a lien on the policy. The British mortality tables consequently are of more value than the American.⁶ But the American companies are now leaning toward the British policy of medical examination and acceptance of risks.

The great function of a medical examination for life insurance, is to guard the company against insuring any applicant with any illness, disease, disorder or condition that their mortality tables show and increased medical observation shows, tend to shorten life. This is distinctly a negative function. To limit the

medical department to the exercise of this one special function, seems to the writer an adherence to a very short-sighted policy. The splendid organization of their medical departments has not been used for four purposes that very properly they may exercise, i. e., first to increase the business of the companies by suggesting to applicants that if certain conditions are corrected, they will be accepted by the company. Second, after the application of the policy holder is accepted, by frequent examinations any condition will be anticipated that may tend to disease or shorten life. Third, by providing proper treatment for their policyholders after they are taken sick. Fourth, by raising the standard of health of the country by means of books, pamphlets and lectures treating of personal hygiene, so increasing indirectly the number available for insurance.

The fraternal life insurance societies provide medical attention, beds in hospitals, and some have sanitariums. The Metropolitan Life Insurance Company in some cities, pays for district nurses and also sends to its policyholders pamphlets on the care and feeding of children and simple expositions of the principles of personal hygiene. This company has also established a sanitarium for the treatment of tuberculosis. The Postal Life

Assurance Company has established a health bureau for its policyholders and extends to them the privilege of frequent periodical medical examinations. The Equitable Life Assurance Society has established a "conservation department," and appropriated a large sum of money for its use. This is sufficient evidence to indicate that it will soon become a fixed policy of almost every company to utilize all the potentialities of its medical departments in the field of preventative medicine. The true function of both medicine and dentistry is to prevent the ills they are called upon to cure.

The exertion of the efforts of the medical departments along the lines suggested will produce results that the writer has indicated in a previous paragraph. Mr. Hiram J. Messenger, actuary of the Travelers Insurance Company, prepared a table which showed that if the insurance companies were to spend \$200,000 a year for the purposes the writer has indicated, and the result showed a decrease in their losses of the insignificant amount of 12-100 of one per cent, they would save enough to cover the cost. If carried out upon a scientific basis and under good business management, with the co-operation of all the companies pulling to-

gether for the common good, he would expect a decrease of 1 per cent of the death claims. A decrease of 1 per cent in the death claims would result in the saving to the companies of seven times the amount expended, or about \$1,500,000.⁷

Considering medical examination from the stand-

point of the elimination of undesirable risks, those diseases and conditions will be examined that are looked upon with disfavor by the insurance companies. Attention will be directed to a few of the maladies and disorders to which septic mouths and carious teeth contribute.

TUBERCULOSIS

Tuberculosis stands at the head of the list. Thirty and one-sixth per cent of the policyholders who die before they reach the age of thirty, die of tuberculosis.⁸ This mortality obtains notwithstanding the fact that the medical examiner's attention is concentrated on the outlook for any sign or symptom of the disease, or any condition that favors its development. Yet for some unexplained reason or no reason at all, the mouth and teeth through which passes and in which lodges fully 75 per cent of the infection that enters the body are ignored!

From a superficial examination of the medical literature, primary tuberculosis of the mouth is very rare and easily recognized. This in spite of the fact that the mouth is the portal of entry of the infection. The mucous membrane of the mouth and gums when in a healthy condition, is almost impervious to infection. This resistance is due to the density of the squamous epithelium, the impaction of

food against the tissues encouraging this thickening and strengthening of the structure.⁹ When the mucous membrane becomes congested, irritated or injured from any number of frequent causes, it is easily and not infrequently infected. The accumulations of calculus and food and the presence of carious teeth and necrotic roots supply a very efficient reservoir of infection for either the structures of the mouth or other parts of the body. The infection is taken into the stomach or some infected material from the mouth may be drawn into the lungs; or a break in the continuity of the mucous membrane may open an avenue for infection; or, the bacillus may make an entrance between the teeth into the pockets that impaction of food and the accumulations of calculus produce; or the infection may proceed from the tonsils; or the tuberculosis microorganisms may enter the system through a carious tooth and infected pulp canal. It needs

no recital of a multitude of cases from medical literature, to demonstrate that this is not only possible, but common and frequent.^{10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41.}

The writer has called attention to the fact, that from a superficial reading of the medical literature recent and otherwise, one is impressed with the idea that primary tuberculosis of the mouth is "a very rare disease." Each author reviewed, says, "it is very rare." This is echoed back and forth, until it seems just so. Yet when fifty to sixty observers note from one to ninety cases each, "it is very rare" begins to fade.

Aside from this superficiality noted, there are three or four reasons that contribute to the cause of this condition being so supposedly rare. First, it is very difficult to differentiate primary tuberculosis from secondary tuberculosis of the mouth, when it is associated with pulmonary or glandular tuberculosis. Second, from a clinical standpoint, there is really no difference between pyogenic periostitis and osteomyelitis, and tuberculosis periostitis and osteomyelitis.^{42, 43, 44, 45, 46.} Third, septic mouths with carious teeth and necrotic roots furnish the best combination of conditions to supply a lesion of the mouth with any one of a dozen pyogenic infections

that lurk in such a mouth; tuberculosis being considered so rare, it is either ignored or forgotten, and the ulceration is attributed to something else. Fourth, the higher up in the air passages is the location of the disease, the more rapid and fatal is its course;²⁵ a lesion of this kind in the mouth is a continuous and prolific source of infection to other organs and other regions; attention is directed to the pulmonary or organic destruction and the small tuberculosis ulcer of the mouth, which has no distinctive characteristics, is overlooked or considered a secondary development.

Three additional factors are flagrantly disregarded by medical insurance examiners. First, decayed teeth and septic mouths are inciters of and commonly associated with mouth breathing. Jonathan Wright has proved that it is possible for five times as many microorganisms to gain access to the lungs and bronchial passages through the mouth as through the nose. Second, it is now very generally conceded, that systemic infection with tubercle bacilli takes place through the mouth and gastro-intestinal tract in fully 75 per cent of the cases. Third, decayed teeth and septic mouths are insidious underminers of the natural resistance of the human organism by impairing the digestion and by the gradual production of a

general toxemia. This derangement of the digestive process and induction of the toxemia is accomplished by the constant ingestion and absorption of the micro-organisms that propagate so rapidly and so freely in the mouth and carious teeth.^{43a, 44a, 45a, 47}

"On the integrity of the digestive system, in tuberculosis generally depends the result of the conflict. On it more than any other part of the body, depends the outlook of the patient for recovery, for unless a proper amount of nourishment properly prepared by it, is given to the cells, they will surely fail in their battle with the disease. From the moment the food enters the mouth, until its useless residue is thrown off, each step of the digestive act is of the utmost importance, hence every part of the alimentary tract should be most carefully watched to see that it functionates properly. The condition of the teeth in pulmonary tuberculosis should always be carefully looked into, as the bad effects of caries on indigestion is well known, and in advanced cases, such caries is unduly common and gives much trouble."⁴⁸ "Those whose digestive disorders cannot be regulated, are doomed."⁴⁹

The writer has not attempted to develop the possibilities that beckon to him of tuberculosis in the mouth.

Facial lupus, tuberculosis of the accessory sinuses, stomach, intestines, kidney, larynx, trachea and œsophagus, and other organs have not been touched upon. Only a few of the phases of this subject that are considered of preeminent importance to life insurance examination have been considered.

To recapitulate:

I. Primary tuberculosis of the mouth is more common than is generally believed. II. It is difficult to diagnose, rapid and fatal in its termination and often overlooked. III. The mouth and gastrointestinal tract are the chief avenue for the distribution of the infection to the rest of the body. IV. A septic mouth with carious teeth is a depot for the insidious dissemination of the disease in the individual and a constant volcano of infection to others. V. The constant absorption of pyogenic micro-organisms from the mouth and the alimentary canal, produce toxæmias of various degrees of intensity, undermining the individual's resistance to every infection. VI. The digestive tract cannot possibly functionate properly when supplied with masses of poorly masticated food.

It seems axiomatic that life insurance medical examination should take into consideration the condition of the mouth and teeth, and its examination should re-

ceive as much care as the lungs; that a septic mouth with carious teeth is of more considerable importance than a poor family history. No influence is so powerful in restoring health and resisting diseases, as a sound, clean masticating apparatus.

BIBLIOGRAPHY.

1. Pliny. "Epistle X." Lecky. "History of European Morals," Vol. II, p. 79.
2. Holden. "Selection of Lives for Insurance." In "Reference Hand Book of Medical Sciences."
3. Walford. "Friendly Societies." "Insurance Cyclopaedia."
4. Greene. "Medical Examination for Life Insurance," 1904, p. 18.
5. Ibid. Pp. 19, 20, 22.
6. Ibid. P. 22.
7. Editorial, Boston Med. and Surg. Jour., Jan. 27, 1910, "Life Insurance Companies as Preventors of Disease."
8. Mutual Life Insurance Company, Mortality Tables.
9. DeFord. Dental Digest, Dec., 1911, p. 675.
10. Dubois. Revue Generale de la Art Dentaire, Jan., 1907.
11. Cook. Dental Review, Jan., 1899, p. 97.
12. Moorehead. Dental Summary, Feb., 1909, p. 146.
13. Cornet. Nothnagel's Encyclopedia of Practical Medicine, American Ed., "Tuberculosis."
14. Bonney. "Pulmonary Tuberculosis and Its Complications."
15. Bridge. "Tuberculosis."
16. Lilitrich. Archives of Diagnosis, July, 1911, p. 280.
17. Gibson. The Medical Officer, 1911, p. 87.
18. French. "Practice of Medicine."
19. Anders. "Practice of Medicine."
20. Osler. "Practice of Medicine."
21. Armstrong. Annals of Surgery, 1910, p. 520.
22. Roberts. International Clinics 19th series, p. 165.
23. Bergtold. Dental Cosmos, 1892, p. 124.
24. Potter. Pediatrics, 1911. "The Portal of Entry, Tuberculosis in Children."
25. Shaupt. American Medicine, Sept., 1908, p. 385.
26. Lanphear. Amer. Jour. of Clinical Med., Dec., 1906, p. 1547.
27. Starck. Munch. Med. Woch., No. 7, 1896.
28. Godlee. Brit. Med. Jour., 1904, p. 1367.
29. Park. "Modern Surgery."
30. Babcock. "Diseases of the Lungs."
31. Bruck. "Diseases of the Nose, Mouth and Pharynx."
32. Brinker. Amer. Jour. of Surg., Feb., 1911.
33. Burdswell. Brit. Dent. Jour., Aug. 4, 1911.
34. Ballinger. "Diseases of the Nose, Throat and Ear."
35. Tilley. Lancet, Oct. 18, 1911.
36. Frissell. Laryngoscope, Oct., 1911.
- 36a. Collyer. "Dental Disease and General Medicine," p. 134.
37. Levy. Laryngoscope, Dec., 1907.
38. Canadian Med. Asso. Jour., Oct., 1911. Final report of the British Tuberculosis Commission.
39. Woodbury. Bost. Med. Jour., Jan., 1910, p. 114.
40. Wood. Therapeutic Gazette, 1911, p. 316.
41. Ramsey. "Practical Life Insurance Examination."
42. Bergmann and Bull. "System of Practical Surgery."
43. Grant. "Surgical Diseases of the Face, Mouth and Jaws," p. 126.
- 43a. House. Cleve. Med. Jour., Oct., 1910, p. 757.
44. Bloodgood. "American Practice of Surgery." "Tuberculosis."
- 44a. Amer. Med. Jour., Aug. 4, 1906, p. 337.
45. Hunter. Brit. Med. Jour., 1904, p. 1358.
- 45a. Dental Cosmos, 1892, p. 126.
46. Owen. Keene's "Surgery."
47. Cruise. Lancet, 1910, p. 1305.
- 47a. Collyer. "Dental Disease and General Medicine," p. 134.
48. Klebs, edited by. "Tuberculosis."
49. Rose. New York Med. Jour., Feb. 3, 1912.

PNEUMONIA

Of those who die under 45, according to the mortality tables of the Mutual Life Insurance Company for the last fifty-six years, 8.6 per cent die of pneumonia.¹ The Health Department of New York State reports for 1911 that pneumonia caused 6000

more deaths than tuberculosis.²

Almost all known pathogenic microorganisms have been proved to be capable of producing pulmonary inflammation. Frankel-Weichselbaum Diplococcus of pneumonia, Friedlander's

pneumobacillus, streptococcus pyogenes, staphylococcus albus and aureus, *B. enteritidis* Gärtner, *B. tuberculosis*, *B. Typhiabdominalis*. Many of these are frequent inhabitants of septic mouths, particularly the diplococcus of pneumonia, streptococcus pyogenes, staphylococcus albus and aureus, and *B. tuberculosis*.³ These microorganisms are also found in carious teeth, infected pulps, pyorrhoea alveolaris pockets and septic tonsils.⁴

Such microorganisms gain entrance to the lungs through the bronchi by inhalation known as aerogenic pneumonia; or through the blood or lymph stream (being absorbed through any wound or break in the continuity of the mucous membrane, as for instance, one produced by the sharp edge of a carious tooth) known as hematogenic or lymphogenic pneumonia.⁵ Furthermore, that pneumonia is not believed to be caused wholly by direct entrance by pyogenic micro-organisms into the bronchii, is brought to our attention by Dr. Birchmore.¹⁴ He shows that more than one writer on the subject believes the condition is very probably due to the absorption of a poison or toxine from the intestine, which poison is an irritant to some parts of the circulating mechanism and sedative to others. Other observers contend that a very definite intestinal

indigestion may cause a fecal toxemia. These toxins absorbed into the blood produce vasomotor and pulmonary symptoms of a very profound and intense character. The writer believes that the microorganisms that produce these toxemias are part of these ingesture of the contents of septic mouths.

Pneumonia is a general infection with a local manifestation. One attack confers no immunity and cases have been recorded in which individuals have had two to fifty-six attacks.

Septic pneumonia is a frequent sequel to operations on the mouth, jaws and pharynx. Septic pneumonia is no uncommon termination to the removal of malignant tonsils. Septic pneumonia frequently follows the extraction of necrotic roots with suppurating tooth sockets.^{5, 7, 8, 9, 10.}

Pneumonia is the most frequent complication and dangerous sequel of measles, scarlet fever, smallpox, typhoid, diphtheria and erysipelas.¹⁵ This suggests not only the possibility but the probability of septic mouths playing a large part in the excitation and the continuation of these complications and sequelæ.

In cases of septic pneumonia it is easy to understand that a patient may very readily draw into the lungs, during or after an operation on the mouth, ton-

sils, or throat, septic material from an oropharynx teeming with pyogenic microorganisms. It is not unreasonable to believe that these same microorganisms may and probably do, in many instances, gain an entrance to the bloodstream or lymph stream during or after an operation on the mouth, jaws or throat and find final lodgment in the arterioles of the lungs, and there set up a pneumonia. Miller and others have noted cases of gangrene of the lungs and pneumococcal abscesses from such cases.^{11, 13}

It is easy to understand fecal toxemia playing the part it does, either alone or in combination with or sequel to the fevers mentioned, in causing pneumonia in these conditions, when there is a constant ingestion of microorganisms from that natural incubator raised to its highest power during a fever, the mouth.

It is easy to understand that the mouth is five times more liable to infect the lungs and bronchi than the nose, because five times as many microorganisms in the air reach the lungs through the mouth, as through the nose. And the chances are five times as great for a mouth breather to contract pneumonia as one breathing through the nose normally. The most frequent cause of mouth breathing is defective and deranged teeth.

The great mortality attributed to pneumonia is due, the writer is firmly convinced, to the fact that it so easily infects individuals suffering from other conditions.

The most important prophylactic measure during the reign of pneumonia is the toilet of the mouth.

TO RECAPITULATE.

I. Pneumonia has a greater mortality than tuberculosis.

II. Pneumococci are almost constant inhabitants of a septic mouth, carious teeth, infected tonsils and infected pulps.

III. That pneumonia may receive some of its infection through the gastrointestinal tract.

IV. That septic pneumonia frequently follows extraction of teeth, operations on the mouth and jaws, throat and tonsils.

V. That septic pneumonia is due to the inhalation of septic material from the mouth.

VI. That pneumonia is the most frequent complication and sequel in measles, scarlet fever, small-pox, typhoid, diphtheria and erysipelas, due either to the ingestion or the inhalation of microorganisms from a septic mouth.

VII. That five times as many microorganisms may reach the lungs through the mouth as through the nose.

VIII. That mouth breathing is most commonly

caused by decayed and disarranged teeth and contracted dental arches.

This suggests the second reason for a thorough examination of the mouth. And it is of considerable importance to life insurance examinations and certainly a powerful consideration in the conservation program.

BIBLIOGRAPHY.

1. Mutual Life Insurance Company, mortality table.
2. Report of the New York State Board of Health, 1911.

3. Adami and Nicholas. "Principles of Pathology."
4. Frissell. Laryngoscope, Oct. 11, 1911.
5. Miller. Dental Cosmos, 1891, p. 706.
6. Begle. Det. Med. Jour., March, 1910, p. 85.
7. Pennsylvania Med. Jour., Feb., 1910, p. 327.
8. Harris. Medical Record, Jan. 1, 1910.
9. Laryngoscope, June, 1911, "Septic Infection of the Mouth and Throat."
10. Phillips. "Disease of Ear, Nose and Throat."
11. Coplan. Pediatrics, Aug., 1911.
12. Babcock. "Diseases of the Lungs."
13. Langworthy. Laryngoscope, Nov., 1909.
14. Birchmore. American Medicine, Sept., 1906.
15. Ker. "Manual of Fevers."
(To be continued.)

PAINLESS DENTISTRY

By C. EDMUND KELLS JR., D.D.S., New Orleans, La.

In this paper the author emphasizes the pulp as a warning agent in the preparation of cavities for fillings and calls attention to the dangers of "painless dentistry." The papers by Doctors Kells and Sexton appearing in the same issue, show the versatility of ORAL HYGIENE and its willingness to present all sides of a question.

Just as a tired army lies down for the night and sleeps without fear, knowing that the faithful sentinels upon the outposts will protect it from surprise, so the human body goes on the even tenor of its way, knowing that upon the approach of its enemy, disease, its faithful sentinels, the nerves, will sound the reveille.

Pain is the signal of distress upon which the absolute welfare of humanity depends.

Upwards of ninety-five per cent of the civilized people of today suffer from diseases of the teeth, and the dread of the pain to be endured in the dental chair is well nigh universal.

Painless dentistry would therefore appeal to the ordinary mind as a "near millennium" period of existence.

I say to the "ordinary mind" because the well balanced and conservative dentist knows full well that as the science of dentistry is practiced today, the painless filling of sensitive teeth is possible, but not practical.

It must be borne in mind that the greatest difficulty ordinarily met with in the proper preparation of the cavity is the proximity of the "pulp" (nerve).

And it is this same pulp that most frequently dictates the character of the filling material to be used.

In a pulpless tooth, the

necessary retaining shape of the cavity may usually be readily accomplished, while with a vital pulp, the contrary is frequently the case.

Again, if the cavity approaches upon the exceedingly sensitive area of the tooth, a filling material which is a good thermal conductor, is surely contraindicated.

Thus we recognize that in a vital tooth, great care must be exercised in both the preparation of the cavity and the selection of the filling material and it is very evident that the sensitiveness of that same pulp is the guide to both.

What then would happen if a very sensitive tooth would be so treated as to temporarily suspend its sensibility during the process of filling? We may be assured that in ninety-five per cent of such cases, the following and nothing else would occur.

(1) The patient would be delighted at the possibilities of "painless dentistry."

(2) The operator would literally enjoy the preparation of such a cavity under such unusually happy conditions.

(3) Not having any sensitive pulp to hamper him, he would prepare the cavity in the most thorough manner, and the question of anchorage would no longer be a bugbear.

(4) He would select a metallic filling.

(5) The operation would be completed to the great satisfaction of the patient and then—

(A) The normal condition of the pulp would soon return, and

(B) This pulp would find itself in close proximity to an undesirable foreign substance, and

(C) The patient would experience an unpleasant "twinge" now and then, and

(D) The "twinge" would become more unpleasant and more frequent, and

(E) And lastly, the filling would have to be removed, the dead or dying pulp extirpated, and the rest could well form a separate chapter.

As a proof of this, we have only to revert to recent history.

A few years ago cataphoresis was the *fad*—that is amongst those who adopt fads. The suspension of the sensitiveness of the pulp by this means during the preparation of the cavity, removed the only guide of the most careful operator as to the proper preparation of the cavity, and the result in many cases was the death of the pulp.

After the passing of cataphoresis, pressure anæsthesia appeared upon the scene, and now prolonged anæsthesia by the means of nitrous oxide and oxygen is the latest scheme to catch the unwary.

Within a few days, the

writer after using every effort for fully fifteen minutes, and failing to make any impression upon a *nearly* exposed pulp by cocaine and pressure, greatly to the patient's discomfort, lowered the dam and injected ten drops of Waite's solution into the peridental membrane (?) of the tooth. The engine bur was then driven right into the pulp chamber in a painless manner, and the balance of the operation satisfactorily finished.

The following morning upon his next visit, the patient remarked: "Doctor, if you can inject cocaine in the gum and take out a nerve painlessly as you did yesterday, why don't you use that process for painlessly filling sensitive teeth?" which was a natural query from a man with hypersensitive teeth. As a matter of fact, this method had been tried by the writer, at times with perfect success, at others not so. Sometimes the operation would be followed by

considerable soreness, for as long a period as a week.

In the writer's opinion, the only hope for painless dentistry, referring to the filling of sensitive teeth, lies in the possibility of transforming the pulp into an osseous condition by some process yet to be discovered in which condition it will remain healthful during the life of the patient.

In the meantime, the best that can be done is to ameliorate the pain as much as is possible with safety.

In ordinary teeth, much of the pain is caused by the heat generated by the cutting instrument. Sharp burs driven at high speed and cutting under a stream of cold air will lessen if not entirely eliminate the pain, usually in a perfectly safe manner, and our patients should be educated up to the fact that under ordinary circumstances, *where needed most*, painless dentistry and bad dentistry are synonymous terms.

THE PRACTICAL AND ETHICAL VALUE OF IMPERFECT WORK

By H. CLAY SEXTON, D.D.S., Shelbyville, Ind.

Dr. Sexton believes it impossible for dental work to be permanent and that we are ethically and otherwise incorrect when we speak of permanent dental work. He believes our duty to our patients includes consideration for their fears and feelings as well as for the ideality of our operations.

Somebody in the dim distant past remarked that an honest confession was good for the soul. That remark

has lived so long it must be true, for only true things live. Now it seems to me that it is about time for the

dental profession to make an honest confession and thereby gain this promised blessing for the soul.

In youth a man starts into life with high ideals, ideals that perfection is possible in our daily walk here on earth and the determination on his part that he shall reach that exalted station. It was so with me and I judge it so with others. But as years go on one realizes that perfection is not to be attained. Yet that realization he will conceal from all, even from himself as much as possible; for all about him he sees and hears others harping on this idea of perfection and he fears that if he once acknowledges anything inferior then he will be placed in the category of the ineffectuals. We all dislike the thought of being so classed and through fear of it we are led into deceiving ourselves and becoming to a greater or less degree hypocrites. We suffer from this self deceit in two ways, personally and through the estimation of the public.

Human nature is at best a frail commodity. There are so many weaknesses and imperfections in the ordinary human being that it seems almost farcical to speak of anything perfect in, on, or about him. There are no absolute extremes—no one perfectly virtuous, no one utterly depraved.

"Virtuous and vicious we all must be

Few in the extreme but all in the degree."

This being so is it not hypocritical to speak or act as if we did things perfectly? We have imperfect, frail, unreliable material to work upon; we are ourselves imperfect to a greater degree possibly than our material: then does it not seem foolish to be everlastingly claiming perfection or anything near it in our daily work? Would it not be refreshing if we could once in awhile hear of a man tell of his imperfect work, of his comparative failure, failures that in a measure succeeded, and not only refreshing but beneficial as well?

To the philosophical mind imperfection seems at times even more beneficial than perfection. This is heretical but I shall try to make my statement understood and then perhaps I shall not be churched.

Some years ago I had a prominent man in our town come to me and say: "Doctor, I want my teeth fixed, but I do not want to be hurt, and I will not be. I may be a baby, but if I am, that is my own business. I want my fillings put in as good as you can put them in without hurting me. If they come out in thirty days, I'll come up, have you put them in again, and pay you again. Will you do my work that way?"

I replied that I would and I did. I filled all of his teeth

that needed it. Believe me there was no extension for prevention practiced, all the soft decay was not even cleaned out in some places. Though I received a good fee and thanks in addition I was at the time quite ashamed of the work.

But, do you know I am not ashamed of it now. I am even shameless enough to acknowledge that I have since frequently done work in the same way. Those fillings in that man's mouth lasted a surprisingly long time, some of them are in even yet, although fifteen years have elapsed. I gained a lifelong friend in that patient and his large family have ever since been on my books.

Let me ask you did not that work pay both in an ethical and a practical way? True, it is not very often that we come across such an avowed example of this class of patients as the man of whom I have told you. But there are more of them among adults than is generally supposed. And when we come to speak of children they are all more or less in the class for whom imperfect work has a high value.

The first time I do work for a child I have but one thought—to avoid all pain and gain its confidence. To leave decayed tissue under a filling rather than inflict pain by taking it out I regard not as a fault but as a virtue.

Have you ever tried it? Do you know how long a filling will last in a cavity not cleanly excavated but which has been washed thoroughly with a good sterilizing agent and then filled? If you are one of those perfect operators who have never been guilty of such so-called slovenly work, try it some time on a timid child or an overly nervous woman and watch the result. You will be surprised at two things—the warm friendship your patient will manifest toward you and the good your work will accomplish.

I hear some one say this is dangerous doctrine that I am preaching here. I do not think so. The safety of it lies, I think, in its open avowal.

After all we have done both ourselves and our profession much harm by our pretence that dental work is or can be permanent. We are misusing the word, degrading it in a way unworthy of lovers of pure English. Permanent means lasting forever. No dental work lasts forever. When we lead our patients to think it will, we misrepresent. And this misrepresentation in the end reacts upon us.

In our dealings with our patients we should not let them think that work once done is done for a lifetime. When a young man I would put on a most apologetic air when a patient returned and reported something gone

wrong with her dental work. As a consequence I was in continual hot water more or less with someone.

It is different now. When anyone returns reporting some filling giving way I accept it merely as a matter of course and lead them to do the same. Clothes do not last forever, nor shoes, nor hats, nor anything else in this vale of tears, even love at times is known to have shown the signs of wear, then why expect dental work to last till the crack of doom? It is a burden the profession of dentistry cannot and should not carry, a burden that like the Old Man of the Sea is sure to throttle us.

And as for guaranteeing any work open or implied, the dentist who does it is most foolish. Does the physician who carries you through typhoid guarantee that you will never have the disease again? Yet he could

guarantee against typhoid as well as we against caries. If we are honest with ourselves and honest with our patients we will get this idea of permanence out of their heads. And in doing so our profession will experience a wonderful advance. We are not carpenters nor masons working in wood and stone and mortar. We are professional men working in living tissues on beings subject to all the weaknesses and frailties of humanity.

We as a profession bewail the fact that only ten per cent of the population try to preserve their teeth. We accuse them of all sorts of criminal negligence and wooden-headedness. Would it not be more profitable for us to bewail the methods past and present that have driven many people from us and have given us such an evil reputation that nine out of ten prefer to lose their

(Continued on page 366.)

DO CLEAN TEETH DECAY?

BY DAYTON D. CAMPBELL, D. D. S., Kansas City, Mo.

Hear ye, hear ye, hear ye; comes now the plaintiff, one Dr. D. W. Barker, City of Brooklyn, State of New York, and alleges (ORAL HYGIENE, March issue, page 179), that the defendant, hereinafter to be known as the Epigrammatist, has been guilty of coining false epigrams that are not true; epi-

grams that are not even one-half truths; and further, that he has done this for the purpose of riding on the top wave of a popular fad.

In the absence of the aforesaid Epigrammatist, let us pause to enquire into these charges.

Dr. Barker proceeds to attack the particular epigram:

"A clean tooth does not decay," and, speaking of the Epigrammatist says: "How does he know it does not"? "He never saw one; neither has anyone else." All right, suppose we concede it for purposes of argument at least. If no one has ever seen a clean tooth, then what evidence has Dr. Barker that a tooth which is clean does decay? Evidently none whatever, since by his own hypothesis he is conclusively estopped from attempting such proof, for, since no one has ever seen a clean tooth it is apparent that no one knows what a tooth would do under such circumstances. It would seem then that the plaintiff has been guilty of just such loose expression as that with which he charges the defendant.

Again, the plaintiff says: "I know a young lady who has extensive decay in both upper and lower incisors, and yet her teeth are clean, as the term is usually used." We are now confronted with the following pertinent questions:

1. Were they clean when they commenced to decay?

2. Were they sound when she commenced to clean them?

3. Is the plaintiff justified in qualifying the term "clean tooth" by the words "as the term is usually used."

4. Is not the statement itself contradictory? "Extensive decay in them, yet they are clean."

5. What is decay?

"If clean teeth do not decay then it must also be true that filthy teeth do decay." What kind of a syllogistic handspring is this? Open the doors to such logic as this and here is a sample of the result: If white men do not go to Heaven, then it must be true that black men do. If white men are not angels, then it must also be true that black men are. If clean water does not taste good, then it must also be true that filthy water does taste good. If a Republican President is not perfect, then it must follow that a Democratic President would be perfect.

Counsel for the defendant moves the Court that this case be dismissed for the want of sufficient and proper evidence.

DO CLEAN TEETH DECAY?

ARTHUR H. MERRITT D. D. S., New York

Another and a convincing contribution to the controversy over whether clean teeth decay and whether it is advisable to teach people that they do not.

Every one must know, who knows anything about the subject, that tooth decay

is not altogether a question of cleanliness or uncleanness of the mouth. There

is every reason for believing that there are other, at present unknown conditions, which act as predisposing causes and which carry with them a susceptibility varying all the way from the most aggravated form of caries to almost complete immunity. How much these unknown factors may be dependent upon local conditions no one can at present say.

It would seem probable, however, that the most potent factor in tooth decay, and doubtless the *controlling* factor in the *average* case, is the local condition, and among these there is probably none comparable in importance to the cleanliness of the mouth and teeth. Any condition which encourages uncleanness of the teeth must therefore be regarded as a serious factor in tooth destruction.

Who has yet measured the influence of uncleanness upon the teeth and its relation to decay? Who is there that doubts that it is far and away the most important factor to be dealt with in the prevention of caries?

How else can be explained the proneness to decay of the approximal surfaces of the teeth? Why is it that the "wisdom" tooth is notoriously a carious tooth? Does any one believe that certain teeth, or portions of teeth, are intrinsically different and therefore less resistant to caries than are other teeth?

Suppose these teeth, or surfaces of teeth, *were* kept as clean as are the labial surfaces of the incisors for example, would they then be more prone to decay than are these surfaces? Suppose further, that these surfaces *were* kept as clean as are the labial or lingual surfaces of the incisors and that they were in consequence as free from decay, would not a degree of prevention have been achieved that would meet all practical needs, certainly as much as can reasonably be expected? Then why should it be thought heresy to teach the children in our public schools that "clean teeth do not decay?"

Have any of the "Doubting Thomases" proved that they will?

Now I am perfectly willing to admit that it is practically impossible by any means at present at our disposal to keep all the surfaces of all the teeth equally clean (not surgically clean, for that is unnecessary, but as clean as the more exposed surfaces of these teeth which rarely decay) and that as a result tooth decay will remain a thing to be reckoned with.

But because in its perfection a thing is just beyond achievement should it therefore be abandoned and its advocates held up to ridicule? I think not. "A man's reach should exceed his grasp, or what's a heaven for?"

WHO SHALL EDUCATE THE PEOPLE?

BY LYMAN L. ZARBAUGH, D. D. S., Toledo, Ohio

In the oral hygiene educational movement, as proposed and as it will be conducted by The National Mouth Hygiene Association, we as dentists have a task worthy of our profession.

Isn't it about time that the public be given something on this subject from an authoritative source?

If the public is going to be properly informed and educated in oral hygiene, is it not true that this information and teaching *must* come from the dental profession?

The task before us is worthy of the profession, that's sure.

Did you ever stop to think what an object lesson could be taught if you could call into your office some Saturday morning, educators and fathers and mothers, to show them the ruin of the first molar and other defects that we have all had under our care? If you could do that, you could strike a telling blow for the examination of school-children's teeth?

That is just what the Association is going to do with the motion picture, take bad teeth, neglected mouths and well kept mouths too, and show them to **MILLIONS OF PEOPLE** in such a

manner as to awaken a desire on their part for a cleaner mouth.

In fact, the picture will show just what people can do for themselves in the way of preserving their natural teeth, and it will show them **HOW TO DO IT**.

The motion picture will create a greater interest, reach a greater number of people and form the opening wedge for the universal dental inspection in the schools, than any other one means at our command.

Plans for the making and circulation of the picture films are practically complete. No less than fifteen films will be going the rounds in fifteen different states this coming year under the direction of the Educational and Oral Hygiene Committee of the state dental society in each state.

The films will be furnished to the state societies at a nominal cost by the National Mouth Hygiene Association.

The style or "story" of the pictures has not yet been definitely decided upon, but it will be something along the following lines:

First, several plain slides, with suitable explanatory text, will be shown before

the running of the picture film.

The moving picture series will open with a home scene, showing family group, children playing or reading, mother sewing or darning, father reading the evening paper. He reads an article published by the National Mouth Hygiene Association: "The time to begin the care for teeth is in childhood," etc. Father calls mother's attention to the article, which is then shown on the screen. They then look at the children's teeth and decide then and there to instruct the children in the care of their teeth.

The next view shows a dental nurse or dentist instructing the children in the proper manner of caring for the teeth, the use of dental floss, the FOLLY of blunt wood toothpicks, etc., the correct method of brushing the teeth, etc.

Then follow with a short "cute" picture of "the baby" brushing his teeth as the dentist has directed.

Other subjects will be shown, with the text or reading matter appearing with the picture, among the most important of which will be the interior of a school room showing the examination of school children's teeth, showing that the instruments are sterilized after each child—a near view of just how it is done; also showing a near view of 20 boys and girls, showing

only the mouth and teeth and pointing out the decayed teeth in each mouth and other defects as they exist.

This part of the picture will show the number or percentage of 20 children needing dental services. It will be vivid and convincing, and should go a long way towards removing the prejudice existing in the minds of many members of school boards and teachers against it. This part of the picture will awaken such an interest on the part of the public that they will demand the examination of school children's teeth—the very thing we are striving for; and the best way to get into the schools is to create an interest in the public mind, which will soon grow into a demand. Our part is to interest and educate the public to the need of this service. The rest will follow naturally. No human needs grow so rapidly into demands that must be supplied as those we do not know we have until our attention is called to them, especially when we learn that others are enjoying such advantages. This is the whole secret of successful advertising. Our race is one that demands equality of opportunity for every member of it and usually gets what it demands.

Then show a near view of an unhealthy mouth, loose

(Continued on page 365.)

EDITORIAL



GEORGE EDWIN HUNT M.D., D.D.S. EDITOR
131 EAST OHIO STREET, INDIANAPOLIS, IND., U.S.A.

ABOUT DR. WILEY

In our March issue, in speaking of the Food and Drug Law, I said it would be strengthened, rather than weakened, and that "Wiley, its apostle, shall continue." Evidently Dr. Wiley did not receive his March copy of ORAL HYGIENE early enough for he resigned his position early in the month. I am confident he would have continued in office had he known I desired it.

What a commentary on the American people his resignation presents. Here is a nation overwhelmingly in favor of the continuance in office of a trusted public servant, but because of the stupidity and vulnerable weakness of an old man who long since passed the period of his usefulness, Secretary Wilson, this public servant finds his ability to serve the people so curtailed and hedged about that he concludes his resignation is preferable to an emasculated career in the public service.

It is a pleasure to know that Dr. Wiley will continue to serve the cause of pure food and drugs as a free-lance. Until Secretary Wilson and Solicitor McCabe are removed, he can no doubt be of greater service as a private citizen than as a public servant.

THE INSURANCE PAPERS

In this issue will be found the first of the series of papers by Dr. Nodine on the necessity for mouth inspection with medical inspection prior to granting life insurance. The paper in this issue covers the subjects of tuberculosis and pneumonia.

I hope all of you will read these papers. They are well and convincingly written and are of the greatest importance. Think what a far reaching effect it will have on the oral hygiene movement when the insurance companies demand that the applicant for insurance shall have a healthful mouth before a policy shall issue. The time will inevitably come when they will do this and the sooner it comes the greater the good to be derived from their action.

For the life insurance companies to insist on mouth hygiene as a pre-requisite to insurance will do more to im-

press the gravity and seriousness of unhygienic conditions on the minds of the laity than any other one thing that I can imagine. It will at once dignify the oral hygiene movement as of importance to the general health of the individual. This is something the mass of the people are slow to believe.

Practically all dentists carry life insurance. Every dentist who does should write to his company asking them to consider mouth examination along with medical examination, as outlined in the May and subsequent issues of ORAL HYGIENE. Copies of these numbers will be mailed the chief medical officer and head actuary of every company whose name and address we can get. Resolutions to this end should be passed at dental society meetings and given prominence in the public press, that they may come to the attention of the companies. Do your part *now*, by writing your company at once. If they do not answer in three or four weeks, write again. If you want this to be brought about, persist, and again persist.

Mouth inspection is of great importance to policyholders, stockholders and prospectives. The policyholder will profit by a longer life, freer from disease; the stockholders will profit by better secured earnings; the prospective by having his attention forcibly and strikingly called to a condition inimical to his welfare.

ABOUT EATING

In the first place, everybody eats too much. I know a man who calmly acknowledges this fact but says he eats the "too much" because he likes it. You cannot argue with that sort of a fellow.

Most people are funny about this matter of eating. When a man goes shooting, he wants his dog lean and spare, all muscle and no fat; when he goes to a horse race, he puts his money on the horse which looks as if it had been trained fine and was devoid of fat; when he goes to a boxing match he is quick to point out superfluous rotundity in either contestant and pick his better conditioned opponent for the winner; but when a member of his family begins to lay on adipose tissue over various and sundry portions of his or her anatomy, he says with pleasure, "Gee! But you are looking fine." Funny, ain't it?

If Johnny or Mabel comes down stairs in the morning, heavy and lethargic because of overeating the day before and display no appetite for breakfast, mother immediately ransacks the larder for something tempting to their jaded appetite. And she will not be happy or feel comfortable

until they have taken what she believes will be enough food to "sustain" them until luncheon time.

When you go out to dinner and eat so blamed much you are dull and uncomfortable for the following two hours, you feel you have shown a proper appreciation of the hospitality you have received and your hostess feels you have paid a compliment to her housekeeping. Ain't it funny?

Some people believe tuberculosis kills more people than anything else. Other people believe whisky works more bodily ills than anything else. Others say filthy mouths are the most fruitful cause of grave-yard activities. But I tell you that food has killed its millions where tubercle bacilli, the demon rum and immoral mouths can only point with modesty to their futile thousands. I mean, of course, improper food, or excessive quantities of food whether proper or improper, or good or bad food improperly eaten. *What* you eat and drink, *how much* you eat and drink, and *how* you eat and drink it, has a greater bearing on your state of health and your longevity than anything else in the world.

I have never tried the "fast cure" because I never believed I needed it. Furthermore, I do not believe it is a universal panacea for all diseases, as some do, but I am firmly of the opinion that the great majority of diseases of faulty metabolism—and what a host of them there are!—are due to what you eat, how much of it you eat, and how you eat it.

About a year ago I lived for three months on nuts, fruits, raw vegetables such as lettuce, cold slaw, onions, radishes and similar foods, and whole wheat bread and butter. I lost some fat, not flesh, but fat, and my friends kept telling each other how badly I looked because my collars no longer fitted my neck, but I felt fine. Except for adding cooked vegetables and, occasionally, eggs, that is still my diet.

The practice of dentistry is especially prone to develop chronic putrefaction in the intestine, of the indolic form; in fact, all sedentary occupations tend to develop it. An unlimited mixed diet, especially if there be an excess of proteids in it, will inevitably lead to putrefactive disorders in the intestine. Putrefaction in the intestine spells auto-intoxication. Auto-intoxication means insomnia, lethargy, loss of memory, diminished brain activity and a host of other evils. When food rots in the intestines—putrifies—toxins are developed just the same as they are when a dead animal rots in the alley. These toxins are absorbed from the intestine and the whole body contaminated by them. All proteid substance lends itself to putrefaction. The proteids especially prone to putrify are the animal proteids, so that

a flesh diet, or even a mixed flesh and vegetable diet, is poison to persons with a tendency to colon putrefaction.

Youth enables one to apparently do things with impunity which middle or old age will not tolerate. I say, apparently. In reality it does not. Apparently people short of thirty years of age can eat and drink as they please and "get away with it." In reality every proteid debauch of that character weakens the resistive power of the body organs to the toxins formed and absorbed until the time comes, along in middle life, when the consequences can no longer be ignored. How many children of even ten or twelve years of age awake with the good spirits and vitality displayed by a healthy baby when it awakes? Precious few! But how many we see reluctant to arise, lethargic, sleepy-eyed, slow of movement and seemingly unrefreshed. Their diet is slowly but surely beginning to assert itself; the poisons of putrefaction are slowing up the bodily vigor.

A well known hygienist said not long since, "We go to the house to keep our dinner engagement. And after all the guests are arrived, dinner is announced, our hostess gives the word, and we file out to the dining room *to commit an assault upon our intestines!*"

Americans are the least sensible people of all civilization about their food. They overeat more and eat with less discrimination and less scientifically than any other people. That is why we have so many specialists devoting their time to relieving stomach and intestinal disorders. "Setting up an explosion," as Elbert Hubbard calls it. And the greater amount of fatty infiltration one accomplishes about his or her person, the more likely we are to exclaim with pleasure, "How well you are looking." Oh, double fudge!

OSSIFIED INTELLECT NO BAR IN CONGRESS

Several friends sent me newspaper clippings regarding the sagacious utterances of one Cyrus Sulloway, Congressman from New Hampshire, at a hearing before the District of Columbia committee on a bill for regulating dentistry. Cy was real frank. He said what was in his mind without fear or favor. He denounced the use of the tooth-brush, lauded the "good old days" of tobacco chewing and snuff dipping and said if he had his way he would make it "a penal offense for any mother to put a tooth-brush in the mouth of a child." Cy is said to be six and a half feet from the top of his head to the soles of his feet and six and a half feet from the soles of his feet to the top of his head, which makes his total perpendicularity thirteen feet. His

photo shows he carries quite a large uncleared area of underbrush on his face, presumably more or less impregnated and pigmented with tobacco juice which failed to receive initial projection force sufficient to establish a trajectory which would carry it over the aforementioned brambles. We have all seen Cy's type before. He is the good, old rough and ready, son-of-the-people sort. He is long on bluster and short on brains. It is probable his feet are cleaner than his mouth; unless it might be on Saturday, before the weekly bath. And when the Boston and Maine railroad pulls the Sulloway strings, Cyrus' arms and legs respond with sundry spasmodic epileptiform flexions and his massive, cement-like brain wabbles sympathetically in a Boston and Mainish manner.

And he is still in Congress from New Hampshire, the one state in New England which has made an earnest effort to throw off railroad dictation and put itself in the forefront of modern political thought and action. Let us hope the enlightened constituency at present misrepresented by Cy will relegate him to his own vine and fig-tree forever, at the next election for congressman from his district, where he may chaw an' chaw with no vexing disease prevention measures to muss up the serenity of his ox-like existence and bring travail to his sodden, stand-pat soul.

EXAMINATION BLANKS

The school examination blanks are now ready. It may be too late to do much with them this Spring but they will be on hand for future work.

In ordering, write your name and full address as plainly and legibly as your writing teacher and your native ability will allow, state definitely just how many you want, and SEND CASH, DRAFT OR MONEY ORDER IN FULL PAYMENT. These are being sold to you at a price which barely covers the cost of printing and handling. Each pad of one hundred contains carbon paper for duplicate copies. The sheets are carefully padded so that carbon copies will be accurate. If you can get them printed cheaper, go to it. I will furnish you one for copy.

The prices on them are as follows:

1 pad of 100 blanks, by mail, prepaid.....	\$0.25
5 pads of 100 blanks, by express, collect65
10 pads of 100 blanks, by express, collect	1.25

All orders of over one thousand blanks, ten pads, will sell at the thousand rate. Do not forget that one thousand

blanks will only make five hundred examinations if you make a carbon copy of each one.

Send your order and money to the ADDISON PRINTING Co., 643 LIBERTY AVENUE, PITTSBURG, PA. No orders will be filled unless the money accompanies the order.

Record of Examination of the Mouth.

School

Date

Name

Address

Age Grade

Condition of Mouth (Check one) Good Fair Bad

Abcesses, How Many?

Teeth Need Cleaning Yes No

Use Tooth Brush Yes No

Any Teeth Filled Yes No

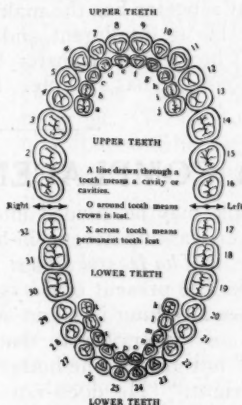
Malocclusion Yes No

Remarks

.....

.....

.....



CARE OF THE MOUTH.—To keep off tartar and have better health, chew every bit of food twice as much as you have been. Clean the teeth every morning before breakfast and at bedtime. The last is VERY important. If you have no other tooth powder you can get a good deal of PRECIPITATED CHALK at the drug store for five cents. The teeth should be brushed by placing them end to end and brushing them in an up and down direction, letting the brush go well up on the gums in both jaws. This should be done on the outer surfaces of all the teeth. Then open the mouth and brush the grinding surfaces hard, being careful to go clear back to the last teeth. Then tilt the brush and scrub the inner surfaces of all the teeth, letting the brush go up on the gums. Then stick out your tongue and brush the top of it. You cannot injure the gums by brushing them up and down. It does them good.

TO PARENTS.—In making this examination for your child, at no cost to you, there was no desire to interfere with your private affairs. We are sure you will be glad to know the condition of the mouth. We hope you will take the child to a dentist and have all necessary repairs and cleanings made. It may be the dentist will find other cavities. Our examination was not meant to be thorough as our time was limited.

A healthy mouth means better chewing of food; better chewing of the food means better digestion of it; better digestion means better health; better health means a stronger, abler child, greater freedom from diseases and better school work. Give your child all the chance you can to grow up healthy and with a good education.

Very truly yours,

SUPERINTENDENT OF SCHOOLS.

If you live west of the Rocky Mountains you will probably find it cheaper to have your own blanks printed, as what we can save you on the printing would be more than offset by the high express rate you would have to pay.

AN EXTREMELY CAPABLE YOUNG MAN

The Editor gave a public address at Youngstown, Ohio, on the evening of March 26, to one of the largest audiences he has ever been favored with. In one of the papers next day, the reporter closed a three-column article on the lecture by saying, "When the last picture had been shown the audience was reluctant to leave and so interesting had been the discourse and the pictures * * * that few knew they had sat charmed for two hours."

That reporter has the making of a great newspaper man in him. He is intelligent and discriminating to a high degree. If he wants to transfer to the New York *Sun* or Chicago *Tribune*, he has my vote. I am for him.

A COMPLACENT OPTIMIST

People may be divided into Will-be-ers, Is-ers, Was-ers, and Never-was-and-never-will-be-ers. A writer from a western state, in *The Dental Digest* for March, is easily classified. He thinks the present oral hygiene movement is a fad. He cannot see anything in it but advertisement for the workers. He not only subscribes to that hoary fallacy, "Whatever is, is right," but goes it one better and believes that "Whatever *was*, is right." He does not believe in school inspection, nor—but what's the use. He is probably a member of the American League for Medical Freedom. One of these "personal liberty" chaps.

OUR COVERS

Dr. N. S. Hoff, editor of the *Dental Register*, speaking of what he calls our "juvenile" covers says, "Don't give up your colors, George, we are getting used to them."

"Sticking to the colors," metaphorically, is one of my best specialties, and in this case the effort is easy. If there is any doubt in anyone's mind as to why we are running the "juveniles," permit me to clear it up by saying that the editor and publishers believe the future of the oral hygiene movement rests largely in the hands of the present juveniles and our covers are one way of expressing that opinion. Depend upon it, we will "stick to our colors," Nelville, to the last ditch.

WHO SHALL EDUCATE THE PEOPLE?

(Continued from page 357.)

teeth, tartar, pus, etc. Move the loose teeth with an instrument; show the ruin that neglect will cause in a mouth; then show this same mouth as it will appear a short time later, unless cared for, as barren of teeth as the mouth of a new baby.

Next show the **PROGRESS OF DECAY** in a tooth from the very start until the death of the dental pulp, the breaking down of the enamel, etc. This will be done mechanically; the decay will be seen **MOVING** towards the pulp; the period or time at which the tooth begins to ache will be pointed out, etc. Some of the text, no doubt, will be along the following lines:

Fig. 1. Uncared-for teeth, showing food particles, which, fermenting, form acid.

Fig. 2. Showing the acid attacking the lime in the enamel rods.

Fig. 3. Showing decay attacking dentine.

Fig. 4. Showing further progress of decay; **TOOTH BEGINS TO ACHE**.

Fig. 5. Showing undermining and breaking down of enamel walls, exposing large cavity which has been forming, unsuspected, for months.

Fig. 6. Showing death of dental pulp, formation of gas, pus, etc., in pulp cham-

ber; escape of gas at apex, swelling, abscess, etc.

This, as well as all of the pictures, will be shown in **MOTION**. Just **WHY** the tooth aches and beats with every pulsation of the heart will be shown.

It has been suggested that inasmuch as we show the death of the pulp, for a change, and to give the people a chance to relax a little, we show the **FUNERAL** of a dental pulp, with the owner of the tooth as chief mourner. Worked up properly it would be very funny and make the people in the theater wonder just how long they will dare to wait before they, too, will have a funeral of their own.

Fig. 7. A badly decayed molar, showing the growth of bacteria in such a tooth in 24 hours. The multiplication of germs also will be shown in **MOTION** and will teach such a lesson that anyone seeing it, who has a decayed tooth, will not go to bed without making some effort to **CLEAN IT UP**. When we consider the appalling rapidity with which bacteria multiply we can realize how interesting this picture is sure to be. According to Conn, professor of biology at Wesleyan University, "it is the power of multiplication by division that makes bacteria so significant. This power of growth is almost incredible. Some species divide every 30 minutes, or even less. At

this rate each bacterium would produce, in a single day, more than 16,500,000 descendants; in two days about 281,500,000,000, or about one solid pint. At the end of the third day, unless checked, the product of one original bacterium would weigh about 16,000,000 pounds. Of course, this growth is only theoretical, as under no conceivable bodily condition could it go on unchecked."

Next, a boy, who **WOULD NOT CLEAN** his teeth; show him going to bed with the toothache (make a striking example of him), show the usual fuss, hot water bottle, etc.; then show a dream that he has while in bed; he dreams of a trip to the dentist, as he **SUPPOSED** it would be. Very funny, of course; yet so arranged as not to bring criticism on the profession or detract from the real purpose of the picture. Then after the nightmare, a trip to the dentist as it **REALLY WAS**; show him treated kindly and relieved of his suffering, etc. State in the text for this picture that **FEAR** and ignorance cause more pain and keep more people from visiting the dentist than any other one thing.

Next show the good resulting from care of the teeth; show a healthy mouth from childhood to old age; show teeth without a blemish, every one sound, with-

out even a filling. This too, will teach a great lesson and make a lasting impression.

While the picture is being run in a city, newspaper articles will be printed of an educational nature, calling the attention of the public to the picture, stating when and where it can be seen, etc. Editors, without any doubt, will write favorable comments on the movement, for they are only too glad to help along any movement launched purely by humanitarian motives.

The pictures will close in some suitable manner. Suggestions will be most welcome and are earnestly requested.

Many men of the profession have signified their intention to be present to help in any way possible when the picture is being made.

THE PRACTICAL AND ETHICAL VALUE OF IMPERFECT WORK

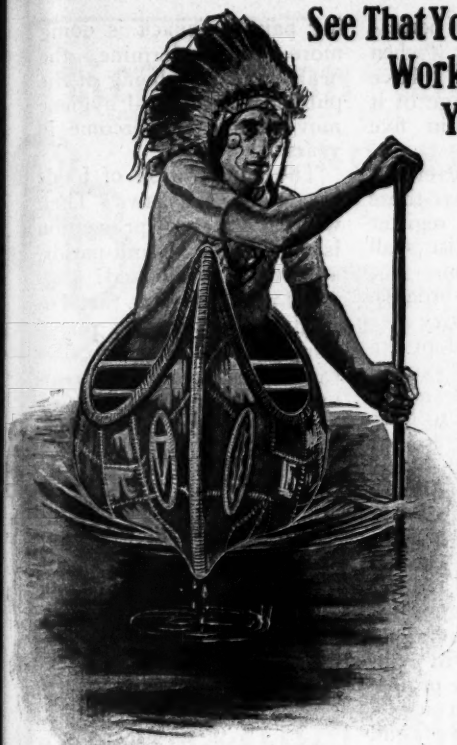
(Continued from page 353.)

teeth rather than come? We talk very pompously of our endeavors to educate the public, but haven't the commonality of people sometimes more sense than we give them credit for? Wouldn't it be a good idea to educate ourselves in some things before we attempt to educate the public?

"I was tortured fearfully when I had my teeth filled," says one patient.

"And I was led to believe

See That Your Gold Solders Work Properly With Your Gold Plates



When the dental gold manufactory of the J. M. Ney Company was established—1812—much of the area of the United States was traveled only by the Indian and trapper. Ohio, Indiana, Illinois and Michigan were known only as The Northwest Territory. Detroit was a frontier fort. It is one of the marks of civilization that in the places once inhabited only by wild men, Ney's Golds are the standards in dental work.

THE perfect soldered joint is the result of interaction between properly made solders and plates.

Under the influence of heat, the gold plate expands, opens its pores and presents the perfect surface for the attachment of solder.

When the plate is in this condition, the properly made solder flows—freely and evenly—and attaches itself to the expanded, open-pored surface of the plate.

NEY'S GOLD SOLDERS

have won the praise of three generations of American dentists *because they interact properly with Ney's gold plates.* They flow when Ney's gold plate of the karat for which they are

marked is expanded to the proper condition for soldering. They are of like color with Ney's gold plate for which they are marked.

To insure the success of your work, insist on receiving only Ney's Gold Plates and Solders. Dealers who seek to supply you with the best, will gladly furnish them. If your dealer insists on substituting others, write us.

The J. M. Ney Company

Hartford, Conn., U. S. A.

711-5-12

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the work would be permanent," added another, "when as a matter of fact I have had a good percentage of it to do over again in five years."

Those who have never had dental work done hear these remarks and at once register a vow that no dentist shall ever get hold of them.

In my opinion to broaden the field of dentistry we must first of all adopt towards our patients a sympathetic attitude. It is, of course, a good thing to have ideals of perfection in our minds, but let us at the same time be ever ready to discard for the time being all our rules for the sake of helping along timid suffering humanity. Let us try to be less machine-like and more like fellow-creatures. And along with our cultivation of sympathy let us cultivate professional honesty. Let us be honest with ourselves and honest with the public; let us acknowledge at once that we make no claims to performing permanent dental work. Then will the public give us their confidence and then and then only will we see the much desired broadening of the field of our chosen profession.

MY IDEA

By C. D. V.

From the standpoint of an ethical practitioner in a small town located near two cities I believe the advertis-

ing painless quack is doing more to undermine the health and well being of the public than the oral hygiene movement can overcome in years.

The adulteration of foods is against the law. Then why as a step of prevention is the \$3.00 a tooth-parlor-advertiser overlooked?

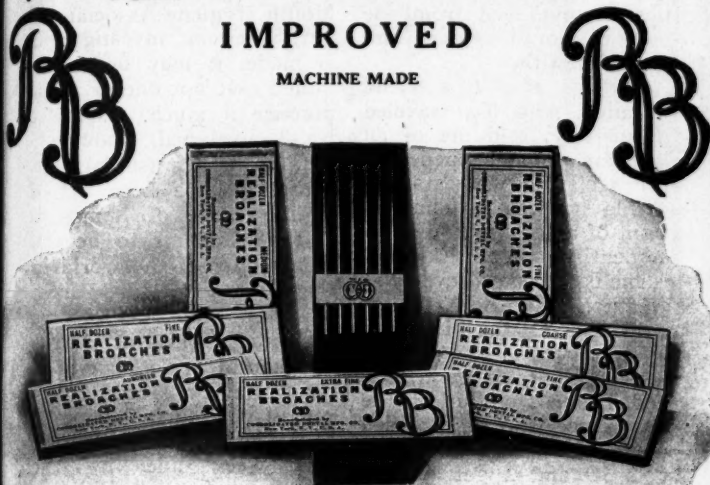
I don't doubt but that Dr. Hunter, the English physician, had one of those \$3.00 cases presented for treatment and he jumped at the conclusion that all American dentists' methods were alike. It is a disgrace to the entire profession to say nothing about the hundreds of practitioners who are laboring so hard to impress upon the patient the importance of prophylaxis and pointing out how the mouth is the ideal place for the incubating or harboring of organisms which give rise to serious diseases; who are teaching how unhealthy conditions of mucous membranes, neglect of the gums and teeth and failure to remove the products of food decomposition are important factors of not only local trouble but constitutional diseases; only to have some quack place an ill fitting gold shell upon an anterior tooth of a lady patient, or on as many teeth as she has money to pay for, forcing the gums away, not restoring contact point, thus inviting and retaining food and bacteria.

Realization Broaches

(Registered)

IMPROVED

MACHINE MADE



WE ARE PLEASED TO INTRODUCE
IMPROVED

Realization Broaches

(Registered)

OUR long experience as broach makers, places us in an unequaled position to produce a superior broach, one which embodies every exacting requirement, bringing it to a high state of perfection, heretofore not found in nerve broaches. Thousand of packages of Improved Realization Broaches have already been used before the appearance of this first advertisement, and we are pleased to state that the test of time and experience has resulted in unqualified approval.

IMPROVED Realization BROACHES

are fine as a hair, flexible and tough. They are accurate and uniform, with the barbs all bristling in the same angle. They are not hard and brittle, and consequently are the safest to use. The package is new and specially designed for the character of the contents. The jet black back-ground shows the barbs in strong relief. Styles: *Extra Fine, Fine, Medium, Coarse and Assorted.*

PRICES

\$1.00 per dozen \$5.50 per half gross \$10.00 per gross

For sale by all leading dental dealers

Consolidated  Dental Mfg. Co.

Please mention ORAL HYGIENE when writing to advertisers.

I am told that if one advertises in Canada his diploma is cancelled, which if practiced in the United States would be a big obstacle removed from the path of mouth hygiene and general health.

Perhaps it is as a friend of mine, who has traveled extensively, told me of an incident which happened in Chicago some two years ago. While he was standing in front of a hotel talking with a dentist, another dentist whom both knew, drove by in an auto. My friend could not help noticing the difference in appearance, and asked why. "Well, he advertises, and I don't. Out of the 100 people who have passed while we have stood here he gets 90 and I get 10 of them."

Why not have someone like Dr. Wiley to weed out the adulterators or else have more strict legislation. The opticians have stopped peddlers from fitting glasses. Why can't the dentists stop the "parlor peddlers"? They can if some one will only start the movement going.

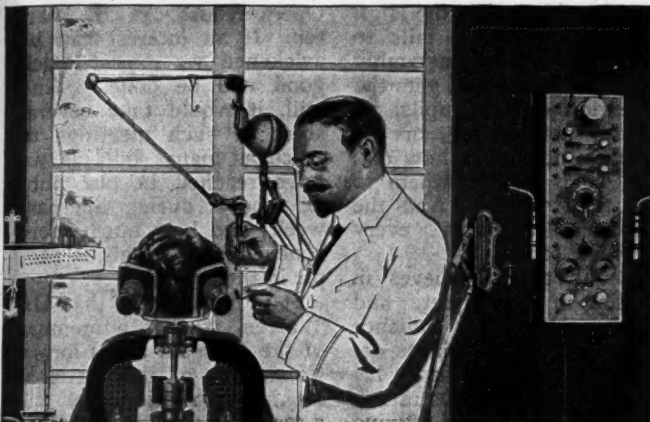
THE MOUTH HYGIENE MOVEMENT IN OMAHA

By P. T. BARBER, D. D. S., Omaha

A boy once told his father that a certain man was a Presbyterian; the father, knowing the man somewhat better than the son, said, "Well, he doesn't practice

it much, does he?" And so, one often hears some member of our profession claim that his brethren as well as he, belong to the National Mouth Hygiene Association, but, when an investigation is made, it may be ascertained that not one of them practice it much. Omaha has awakened, however. During the past ten days the profession has been active in the cause of humanity and now claims to be the banner city of the world in that more persons have heard Oral Hygiene lectures by a practitioner of dentistry than in any other city in the world. Dr. Horace Warren of Missouri Valley, U. S. A., has been here for the past week and by the courtesy of the Billings-Marshall Dental Supply Co., an auto and driver were placed at the disposal of the committee, one member of which went with Dr. Warren always, to present him to the pupils. Besides the 23,000 pupils in Omaha and 6,000 in South Omaha, there are about 500 teachers. On account of the lack of assembly rooms, it took five days to accomplish the work. There are about 44 buildings in the two cities and with few exceptions, it was necessary to speak two or three times to reach every room.

Dr. Warren speaks very rapidly, in length of time all the way from six to seven minutes in the primary



What Every Dentist KNOWS

That a modern, complete, efficient office like this is what every member of the profession eventually wants.
But—

What Every Dentist DOES NOT KNOW

is that it would actually cost you LESS right now to own such apparatus than it is costing you to practice WITHOUT it.

Dr. H. C. Register has many times expressed himself that the addition of compressed air alone to the dentist's equipment would pay for itself, if it did no more than replace the hand syringe.

Therefore, all the other hundreds of uses for

Electro Dental Electrical and Pneumatic Outfits

represent just so much actual profit.

To which must be added the increased prestige the equipment develops among your patients.

Our book, "Electricity and Pneumatics in Operative Dentistry," is not a catalog, but a treatise on the many specific instances in clinical dentistry where the use of compressed air and electricity so far increases operative efficiency as to pay for itself.

A copy of this book will be sent WITHOUT COST to any dentist on request.

If it is more convenient, fill in and return the attached coupon NOW. Address 1223 Cherry Street.



Electro Dental Mfg. Co.
Philadelphia

RETURN THIS COUPON—
O.H. 5-12
Gentlemen:—
Send me catalog
and booklet "Elec-
tricity and Pneu-
matics in Operative
Dentistry."
Name
Street Address
City

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room, to 15 or 20 in the High school. He never fails to fill the largest assembly room with ease and gets the attention of the pupils, no matter how young, or the teacher, no matter how old, and holds both of them to the final word. And the children remember every word he says.

Dr. Warren believes in dealing in the concrete; and so, he gives every audience his directions in minute detail, using the brush on his own teeth in illustration. Dr. Warren is a living example of what Brushing Before Breakfast and Brushing Before Bedtime will do for a person for, although nearly 54 years of age, he has but one filling in his teeth which was made 35 years ago.

The Nebraska State Dental Society is planning for a big oral hygiene meeting during their meeting at Lincoln, May 21, 22 and 23, with a public lecture in the

Opera House by Dr. Warren. If an interest can be awakened we expect much good will be done. And still, it would take several score of such meetings to reach as many souls as we have reached in our public schools during the past week; and how much more beneficial it is to talk to people in their youth.

It is quite likely that Dr. Warren, who is a member of the Museum and Library Committee of the National Dental Association, now has a record of speaking to more persons than any practitioner of dentistry extant. He has spoken to 6,000 in Des Moines and that together with 3,000 in Council Bluffs, 800 in Bedford, Ia., and 900 in Missouri Valley, makes for him over 40,000 when the teachers are included. If anyone can beat that in America or Europe, we would like to hear from him. So, you see, Omaha is practicing what it preaches.

SAVE THE BABIES

The New York Bureau of Municipal Research gets out some vitally interesting literature. A batch recently received is largely devoted to saving the babies. By means of pure milk depots, education, the establishment of "Little Mother Leagues," and various other means, there were 888 fewer babies under one year of age died between January 1st and July

1st, 1911, than during the corresponding period in 1910. This in New York City. Is not that worth while?

One of the Bureau's bulletins copies the following from the bulletin of the Chicago Department of Health:

THE DUTY TO ENLIGHTEN MOTHERS.

Are you making a drug fiend of your baby? You are in very great danger of doing so if you

If you are not particular it is very easy to buy a cement **NEARLY AS GOOD**, but it is just as easy to buy **FELLOWSHIP CROWN-BRIDGE AND INLAY** if you are.

ASK ANY DENTAL SALESMAN



**The Strongest, Stickiest Cement Known
LEARN TO SAY FELLOWSHIP**

**Manufactured by
DENTAL PROTECTIVE
SUPPLY CO.**

2231 Prairie Avenue

:

Chicago

are giving it some of the so-called "soothing syrups."

Many of the best known soothing syrups are soothing only because they contain such dope as opium, morphin, heroin, codein, chloroform and chloral hydrate in some combination. The following, according to the Division of Chemistry of the Department of Agriculture, Washington, D. C., are soothing syrups of this class:

BEWARE OF THESE BABY KILLERS.

Children's Comfort (morphin).

Dr. Fahey's Pepsin Anodyne Compound (morphin).

Dr. Fahrney's Teething Syrup (morphin and chloroform).

Dr. Fowler's Strawberry and Peppermint Mixture (morphin).

Dr. Groves' Anodyne for Infants (morphin).

Hooper's Anodyne, the Infant's Friend (morphin).

Jadway's Elixir for Infants (codein).

Dr. James' Soothing Syrup Cordial (heroin).

Kopp's Baby Friend (morphin).

Dr. Miller's Anodyne for Babies (morphin and chloral hydrate).

Dr. Moffatt's Teethina, Teething Powders (powdered opium).

Victor Infant Relief (chloroform and cannabis indica).

Mrs. Winslow's Soothing Syrup (morphin).

The drugs named in parenthesis were found in the concoctions named.

Dope of this kind does great harm to babies. There are numerous cases on record where the baby has been put to sleep never to awaken again. "In some instances in which soothing syrups are freely used and the child does not succumb there is developed a case of infant drug addiction. As soon as the effects of one dose pass away the child becomes irritable and fretful, with the result that another dose is given, the craving is met and the child is quieted—a condition which is analogous in every respect to drug addiction among adults.

Sometimes these children look plump and healthy, but as a matter of fact their flesh is soft and flabby and they withstand attacks of illness very poorly."

These facts have been pretty well understood by the medical profession for some time, but it is our observation that there are thousands of Chicago mothers who still are ignorant of the harmful effects of this kind of dope. It is our duty to enlighten these mothers.

Another bulletin gives the following pertinent and interesting information:

HOW MANY BABIES DID DIE?

In Montclair, N. J., with a population of 22,000, *only one* baby under 2 years of age died of a diarrhoeal disease during the hot spell of July 1st—21st.

At Montclair's rate these cities of 20,000 would have lost only one baby:

Beverly, Mass.
Burlington, Vt.
Bloomfield, N. J.
Danbury, Conn.
Cohoes, N. Y.
Madison, Wis.
Muskegon, Mich.
New Brunswick, N. J.
New London, Conn.
Stamford, Conn.

These cities of 40,000-50,000 would have lost 2-3 babies:

Atlantic City, N. J.
Augusta, Ga.
Bayonne, N. J.
Holyoke, Mass.
Lincoln, Neb.
New Britain, Conn.
Saginaw, Mich.
Springfield, Mass.
Superior, Wis.
Wheeling, W. Va.

These cities of 60,000-70,000 would have lost 3-4 babies:

Akron, O.
Charleston, N. C.
Elizabeth, N. J.
Erie, Pa.
Fort Wayne, Ind.
Hoboken, N. J.

Is Your Time Valuable

and are you abreast of the very latest minute of the time? If you are, you are duty bound to investigate the merits of the new

Justi True to Nature Teeth Anteriors and Posteriors

An entire upper and lower denture of these teeth can be articulated without spending your valuable time in grinding the teeth to conform with the mechanical action of the jaws in regard to the incising and lateral motions. Each tooth has its proper position, the upper bicuspid and molars contacting with the corresponding teeth of the lower jaw, no grinding being necessary.

The following method, if observed, will save time in articulating a set of these teeth: first set in position the upper ten anterior teeth, taking into account the proper fullness and length, then begin with the second lower bicuspid, continue with the first bicuspid, cuspids, laterals and centrals, then place the lower molars in their proper positions with a slightly upward curve, lastly the upper molars.

Ask to see Molds No. 228 to 234

H. D. Justi & Son

Philadelphia

Chicago

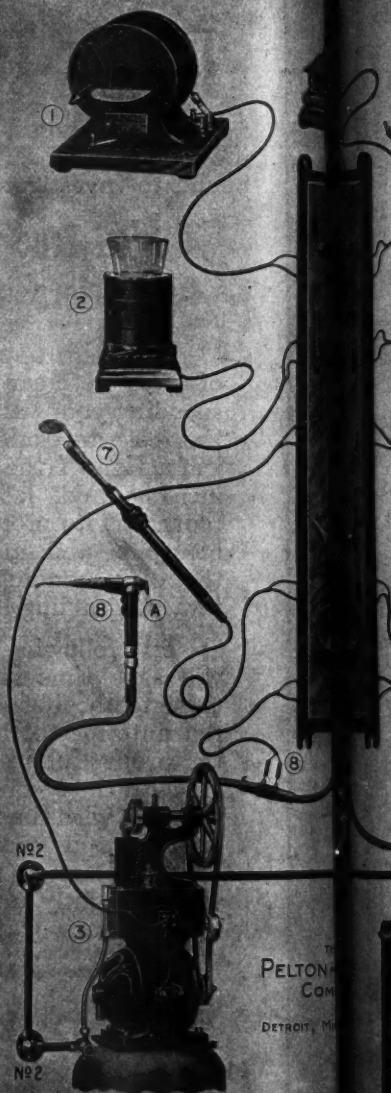
WE have a new and very handsome catalogue.

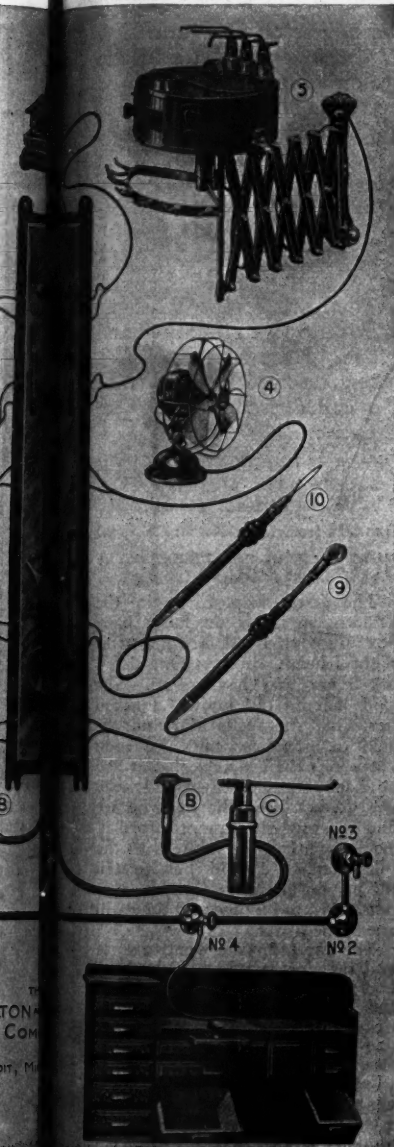
It tells you all about the Switchboards we make and the accessories that go with it.

A Switchboard in a dentist's office isn't a luxury any more. It is an absolute necessity for the practitioner who isn't satisfied to work for the kind of fees his grandfather used to make.

A Switchboard is an ornament in any dental office that attracts the favorable attention of every patient entering it, and the use of it is bound to increase the income of any dentist possessing it.

The catalogue contains a wealth of information for the practical den-





tist, and illustrates each and every one of the accessories to be attached to the Switchboard, and quotes prices. It doesn't cost you any more than a few minutes of your time and a penny postal card to make sure that this catalogue will be delivered to you.

If we didn't feel quite certain that it would prove useful and valuable to you, we wouldn't be so anxious to have you send for it.

The very next minute that your office is empty and you have a little time to yourself, sit down at your desk and send for this catalogue

"1912 OFFICE EQUIPMENT"

**The
Pelton & Crane
Company**

Macomb and Beaubien Sts.
DETROIT, MICH.

Manchester, N. H.
Norfolk, Va.
Peoria, Ill.
Utica, N. Y.

These cities of 80,000-100,000 would have lost 4-5 babies:

Camden, N. J.
Dallas, Tex.
Des Moines, Ia.
Hartford, Conn.
Kansas City, Kans.
Lawrence, Mass.
Lynn, Mass.
Newton, N. J.
Reading, Pa.
Salt Lake City, Utah.

And these cities of over 100,000 would have lost babies as follows:

Atlanta, Ga. (154,839).....	7
Buffalo, N. Y. (423,715).....	19
Chicago, Ill. (2,185,283).....	99
Cincinnati, O. (364,463).....	16
Cleveland, O. (560,663).....	25
Columbus, O. (181,548).....	8
Jersey City, N. J. (267,779).....	12
Kansas City, Mo. (248,381).....	11
Milwaukee, Wis. (373,859).....	17
Newark, N. J. (347,469).....	16
Pittsburgh, Pa. (533,905).....	24
San Francisco, Cal. (416,912).....	19
St. Louis, Mo. (687,029).....	31
Rochester, N. Y. (218,149).....	9
Detroit, Mich. (465,766).....	22
Memphis, Tenn. (131,105).....	6

HAVE YOU TRACED THE RELATION IN YOUR CITY?

For years Montclair's milk inspection has furnished an example to other cities:

1. It records a painstaking description of every milk shop and dairy supplying the city, according to the score card provided by the U. S. Government.
2. Inspection is continuous.
3. It publishes the results of its inspection, showing whose shop is cleanest, and whose dairy gives the lowest bacterial count.
4. It refuses to permit the sale of milk by dealers and dairymen who do not comply with its requirements.

Think that over. Your Board of Health can give you

the figures on your own city. It seems a little late in the season to print this kind of literature, but good reading is always in season, and perhaps you may remember this when next summer's heat comes on. What is *your* town or city doing to save the babies?

The Little Mother's League is evidently well informed and active. Here are samples of letters received from some of the children constituting the League:

IF A LITTLE MOTHER STOPS YOU LISTEN TO WHAT SHE SAYS.

(Extracts from Little Mothers' Essays.)

WHAT I DID FOR THE LITTLE MOTHER'S LEAGUE.

The Lady who Lives in the same house as we do, has a baby boy, 9 months old. Night after night I hear him cry. One day I asked her why he cries so. She said she did not know. I asked her what she feeds him and she said on groceries milk. I soon know why the baby cries so, it had stomach trouble. I asked why she doesn't keep the milk on ice and she says she cannot afford it. So I gave her the address to the milk depot. I told her to tell the person in charge that she cannot afford to buy ice and they will try to help her.

The day after she went to store and the doctor told her the baby had stomach trouble. He gave the baby the right milk and a ticket for ice. Since that very day the baby drinks the milk, he sleeps during the night as if there were no baby. She thanked me very much and said I have saved a child from suffering pain and a mother from becoming ill, because when people do not sleep at night they usually become sick.



The Open Door to Success

To the dentist who equips his office with Pressed Steel Aseptic Furniture, the Portal to Success is always wide open.

It is almost impossible to conceive of a place where absolute cleanliness is more important than in a dental office. Cleanliness means bigger fees and an increased practice for the dentist—particular patients are willing to dig down deep to pay for the service that Aseptic White Enameled Furniture enables you to give.

The reason is plain—the public is more fully awake to the importance of the oral hygiene movement than ever before. They are demanding clean methods in dental work. The dentist **must** realize this—or lose out.

Wooden cabinets cannot be made wholly aseptic—not even with live steam. Pressed Steel Cabinets **are** clean—and look the part. The impression received by the patient when he enters your office and sees your White Enameled equipment is sufficient assurance for him of your methods.

The picture book tells you more about how to find the Door to Success. Send for it NOW.

LEE S. SMITH & SON COMPANY, **Pittsburgh, Pa.**

WHAT I HAVE DONE FOR THE MOTHER'S LEAGUE.

One day as I was walking in the street I saw a baby in a carriage fast asleep with a nipple and a empty bottle in its mouth. So I saw the mother from the child and I told her nipples is a real death for a child. When the baby is having its sleep, the nipple should be in a glass of borax water ready for its meal. The mother from that child thanked me very much.

ANOTHER TESTIMONY.

One day I walked in the street and I saw a woman giving a baby a loly-pop which had been sucked some time by her elder son. I went over and told her that loly-pops or any such food was the same as giving the child some poison. She asked me how I know and I told her I had learned it at the Little Mother's League. She took the subject under consideration and threw the loly-pop away.

HOW I HELPED THE MOTHER'S LEAGUE.

My little sister does not feel well I said to mother: "Mama, baby has diaria or loose bowels. Stop all milk, solid food, give her a dose of castor oil, and then take her to the doctor. My mother tried castor oil, but nothing helped. She went to the doctor, I went along to see what he would say, and what do you think he said, exactly what I did and added something new to it.

HOW I WAS A "LITTLE MOTHER."

One day when I was on the pier with my little brother, a man who took care of a baby gave it a bottle of coffee. I saw the bottle was dirty and told him the baby would get sick. He said to me "Mind your business." I said I belong to the Little Mothers' League and I know how to take care of babies. The next time I saw the baby sleeping with a loly-pop in his mouth, the flies were flying on it, but my little brother was covered with a veil and I fanned him. The next week I saw the baby and he looked sick.

I told the father to go to the doctor. Now he took my advice and when he came back he said the baby had summer complaint, but in three weeks the baby was well again. I think the father will never again give the baby those things.

THE BARBARITY OF BANQUETS

When is a courtesy not a courtesy? — when expressed in the form of the conventional banquet, one concludes from an editorial article in *The World's Work*. The preachment is based on the illness of Admiral Togo on his recent visit to this country, luncheons and dinners doing for the Admiral what a Russian fleet was incapable of doing.

"Whereby," says the writer, "hangs a moral: Considered from an artistic point of view or from the point of view of a refined hospitality or from the point of view of good character and of common sense, most of our public hospitalities are vulgar barbarisms. A distinguished visitor comes. A luncheon today of seven or eight courses with the thick fumes of tobacco—in its worst form of cigarettes—a dinner tonight of even more courses; three or four hours at the table in the afternoon and four or five hours in the evening spent how? In listening mainly to ill-prepared, cheap-witty speeches, a dozen or so of them. And the guest can seldom say, when his turn

EXHIBIT of Ascher's
Improved Artificial
Enamel at the big New
York meeting last month.



At this meeting over 6,000 dentists showed their interest in our products, and the sale of Ascher's Improved Artificial Enamel, Tantalum Burnishers, etc., was enormous. Eight years of wonderful success among the dentists has created a corresponding confidence.

THE PINCHES DENTAL MFG. CO.
BUFFALO, N. Y.

Please mention ORAL HYGIENE when writing to advertisers.

comes, any very important thing that he might say; for the tone and atmosphere of the occasion restrict him to an expression merely of his own unbounded pleasure at so hospitable a reception! Then the same program the next day; and so on. These occasions make gluttons and prevaricators of all but the most resolute and self-restrained men—hosts and guests alike.

"Fashion has its tyranny in public entertainments as strong as in millinery; nobody dares do a genuine, unconventional thing. The rule of 'banquets' and of speeches by 'prominent citizens' is rigid.

"Suppose a public dinner were given at which simple and wholesome food were served in moderate quantities — such a dinner as sensible and healthy men eat every day—and in a dainty and artistic way, without bulk and without profusion; and suppose one man who was a graceful speaker were delegated to prepare a short speech in which he should say all that is necessary with skillful brevity; and suppose the prominent citizens were kept in silence and the company might go from the table after an hour or two instead of four or five hours—that would be real hospitality. The dinner and the speeches could be made works of art; and hosts and guests would go away refreshed and get to bed at their regular hours

and feel that they had played parts in both a genuine and happy occasion.

"Even when we have no distinguished visitor, we play havoc with good taste and good digestion at our public dinners. If we wish to reform the tariff or the currency or to further a movement for better tenements, we first fill up with food till we so deaden our sensibilities that we laugh at introductory witticisms as old as the abuse that we've meant to abolish."—*Good Health*.

"He cleared the sill at a bound and vanished in the darkness," related Romance, breathlessly.

"But," scoffed Realism, "only a moment ago he was riveted to the spot. Did he file the rivets?"

"Oh, no!" rejoined Romance, nothing daunted. "Fortunately it was only a small spot, so that by a superhuman effort he wrenched it loose and carried it along with him." —*Puck*.

NO HURRY

Dentist—"Certainly, I can pull your tooth, madam. It will cost you \$2.

Lady—"Two dollars! Why, other dentists only charge 50 cents."

Dentist—"True, madam, but they hurry with their work, while I often spend an hour or more pulling a single tooth. I must charge for my time, you know."—*Chicago News*.

Adrenalin

Powerful

Astringent
and

Hemostatic

This is the active principle of the suprarenal gland, isolated by a member of our scientific staff and given by us to the world in 1900. It is an astringent and hemostatic of remarkable potency. In the opinion of many able therapeutists it represents one of the most important medical discoveries of the last quarter of a century.

◆ ◆ ◆

In solution, in which form it is obtainable in any pharmaceutical market in the world, this product is of inestimable value in the practice of dentistry.

It affords a bloodless field during oral operations.

It controls bleeding of the gums in crown-fitting.

It arrests hemorrhage after tooth-extraction.

It admits of quick and painless pulp-extirpation.

It is prompt in action; it is cleanly; it is aseptic.

It is easily used: saturate a pledget of cotton with it, full strength or diluted, and apply direct to the affected part—the action is immediate.

SOLUTION ADRENALIN CHLORIDE 1:1000.

(Adrenalin chloride, 1 part; physiologic salt solution, 1000 parts.)

Ounce glass-stoppered bottles.

PARKE, DAVIS & CO.

Home Offices and Laboratories, Detroit, Mich.

WHAT THE SANITARY CRANK SEES

The *Monthly Bulletin* of the Indiana State Board of Health reports the following phenomena as having been observed in cafés by a sanitary crank. We commend the habit of observation to everyone interested in health, remembering, however, that it is not the mere fact of observing that will change conditions, but by getting awfully busy in a clean-up campaign:

"I have seen a waiter wipe his sweaty forehead with the towel he carried on his arm for wiping dishes.

"I have seen knives, forks and spoons which had been used a short time before, simply wiped on a not too clean tea-towel without even dipping them in water.

"I have seen tumblers, after having been used at table, simply wiped with a not too clean tea-towel without even dipping them in water.

"I have seen knives, forks, spoons and tumblers, after use at table, rinsed in greasy, yellowish dishwater and then wiped with a tea-towel which was an approach to rubber roofing in color.

"I have seen restaurant kitchen help pass hands through their hair and then handle sliced bread.

"I have seen two mice jump out of a bread box and the sliced bread therein sent to the table as if nothing had happened to it.

"I have seen a waiter pick two flies out of a glass of milk with his fingers and then place it on a table to be drunk by a child.

"I have seen a cook at a nickel-bound grill in white cap and coat, insert his finger in his mouth to scratch the interior surface and upon removal immediately pick up a nice porterhouse steak and place it upon the broiler.

"I have seen flies proceed direct from a spittoon to a bowl of berries on the counter which were waiting there to be served when called for.

"I have seen a cook change his shoes and socks in his kitchen and then, without washing his hands, proceed with the handling of food.

"I have seen a bowl of sugar spilt upon the floor, then picked up with the hands and carried directly to the table.

"I have seen a basket of lettuce sitting on the floor in a restaurant kitchen and a dog belonging to the cook, but never mind—

"I have already probably seen too much and will cease with the observation that we eat heaps of microbes without receiving any harm, and then again harm does result."—*Good Health*.

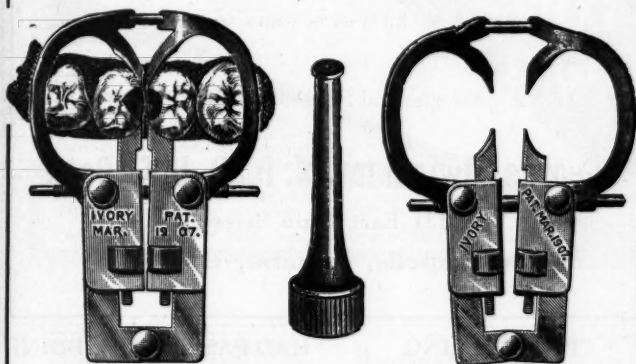
"The Hague has done much toward promoting peace in the world."

"Yes," replied Miss Cayenne, "and so has Reno."—*Silent Partner*.

IVORY'S

Adjustable Separator

Patented March 19th, 1907.



THE QUICKNESS OF ADJUSTMENT BOTH FOR PLACEMENT and DIS- PLACEMENT IS A MIGHTY FACTOR.

The jaws of each half of the separator working independent allows for the difference in the size of the teeth, gives a wide range for the adjustment of the jaws where the teeth are irregular, and a perfect control over the jaws so that they need never interfere or cover the margin of the cavity. The spreading force is many times slower than the ordinary screw force, no binding of the screw is possible, and its action is the most powerful screw force known.

Because the control of the jaws is complete, the movement of the spreading force so slow and evenly divided and the sense of such perfect, the pain in separating the teeth is reduced to a minimum.

It is universal for all operations, even, beyond the first molars working on either side of the arch by changing the thumb nut.

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TOO WILLING

Cashier—"I'm sorry, madam, but I can't honor this check. Your husband's account is overdrawn."

Lady—"Huh! I thought there was something wrong when he wrote this check without waiting for me to get hysterical!"

"The old oaken bucket,
The iron-bound bucket,
The moss covered bucket"
Don't hang in the well.
The doctors dismissed it,
Health officers cursed it,
And threw the germ crusted
Old bucket to—well—
At any rate, the old song's
dead;
And we use a sanitary cup
instead. —Borrowed.

HAD PASSED THE POINT

Pat—"I hear yer woife is sick, Moike?"

Mike—"She is thot."

Pat—"Is it dangerous she is?"

Mike—"Not at all! She's too weak to be dangerous any more!"

I know of a land where the
streets are paved
With the things we meant to
achieve.
It is walled with the money we
meant to have saved
And the pleasures for which
we grieve.
The kind words unspoken, the
promises broken,
And many a coveted boon
Are stowed away there, in that
land of somewhere—
The land of "Pretty Soon."


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**THE STAMPER
STERILIZER**
WATER ^{AND} SPRAY HEATER
**IS IN THE
SPOT
LIGHT**

It is not in your laboratory. It is not in some dark and inconspicuous corner. It is on a bracket, at your chair, plainly marked "STERILIZER" and your patient can see that you sterilize every instrument. Its three ways of heating—gas, alcohol or electricity—make it available in every office. Its elegant finish—in either white porcelain enamel or nickel-plate—makes it an ornament to any office. *For Sale by all Dealers.*

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Philadelphia's Best Practitioners give it preference for the following reasons:

1. Because it is a pleasure to work it.
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5. Because our constant endeavor to make it better, keeps it best.
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Agencies: Geo. Chalk & Co., London, for Great Britain; Societe Francaise de Fourniture Dentaires, Paris, for France and Switzerland; H. Mallan, Adelaide, for Australia; T. Yamada, Tokyo, for Japan; A. Recio, Havana, for Cuba; Leading Dealers in United States and Canada.

THE INVENTOR

Is this not a strange man? He looks hungry and needs a shave. Mortification has set in on his necktie, and the front of his coat is covered with congealed gravy. He has a bundle under his arm which looks like a bag full of augers. Those are ideas he has, and he is going to see his attorney who sits in an office furnished in real leather and mahogany, and a brass cuspidor. The inventor has a wife at home who takes in washing, and a red-headed daughter who operates a filling machine in a bologna works. They have worked six months for the money the old man has in the greasy tobacco bag. The at-

torney will talk to the unwashed guy, and fill him full of prunes about his edible bicycle tire. He will then do a vanishing stunt to the old man's wad, and paint him a word picture of the family riding in a gold-plated, seven-cylinder Panhard Limousine, with a fur-coated, wooden-faced James at the tiller. The old man stops at the nearest jewelry store and sees a diamond in the window as large as a guinea egg, which he promises to have set in the handle of his snow shovel when he gets his first royalties. He will then go home and tell the family all about it, while they are eating their corned beef and cabbage, and they all go to bed doped. It

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**Cabinet No. 92
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IN no other article of Dental Office Equipment is the demand for quality in design, material and workmanship so insistent as in Dental Cabinets.

In no other line of cabinets is this quality so evident as in the American line of Dental Office Furniture.

The cabinet shown is not high priced, but it is an attractive design; the materials entering into its construction are first class; its workmanship and finish are high grade and it is very conveniently arranged. Our NEW catalog describes it in detail, and shows a fine line of Operating and Mechanical Cabinets, Work Benches, Reception Room Furniture, Bracket Tables, etc. *Ask for it.*

You can buy our goods, together with Chair, Engine, Cuspidor, and in short a complete outfit, on one contract on easy monthly payments.

The American Cabinet Co.

Department F

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To any advertising dentist desiring to advertise the Jacob Petry Suction Retainers in the newspapers, we will send cut like this **Free of Charge.**

The Jacob Petry Suction Retainer is the only device on the market today that will successfully cure wobbly plates. It is entirely different in principle from any other suction retainer on the market. It has to be tried in order to be appreciated.

Another Offer.

Send us teeth set up in wax ready for flasking, put on a good model, and we will send you rubber plate, finished, with suitable Jacob Petry Retainer attached. First order, \$2.00, subsequent orders, \$3.00. Cash should accompany order.

Order NOW.

Jacob Petry Suction Retainer Company
2022 Lowrie St., N. S.,
PITTSBURGH, PA.

will be a long while for the old man to get wise but in the meantime his imagination is working double shift.

We would rather work for a living than be an inventor.—
N. H. S. in Silent Partner.

MODERN MENU

Typhoid oysters on the half shell.

Benzoate of soda soup à la mock turtle.

Ptomaine halibut,

Roast beef à la arterio-sclerosis, with prussic acid succotash and sulphate of copper peas.

Lettuce salad with aniline dyes.

Lactic acid Philadelphia cream cheese, with papier-maché crackers.

Caffeine precipitate, with New Hampshire quarry sugar.

Finger bowls with streptococci water.—*Life.*

VERY FOOLISH

"Last night my wife and myself had the most foolish squabble of our married life."

"What was the subject of your dispute?"

"How we would invest our money, if we had any."

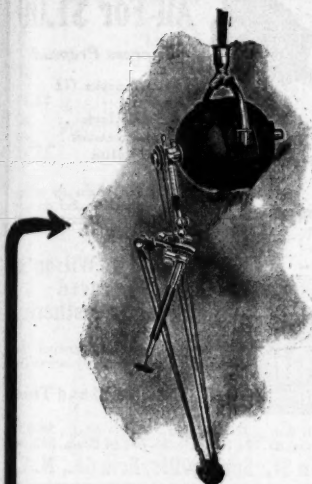
—*Louisville Courier-Journal.*

Smith—"Well, but if you can't bear her, whatever made you propose."

Jones—"Well, we had danced three times, and I couldn't think of anything else to say."

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To find out that the Columbia Engine is better than any other on the market, from **every practical point**, is to put one in your office under actual working conditions.

¶ If you think you like some other engine for some one fancied point of advantage, put our engine into your office alongside **of any** other and try them out side by side.

¶ It won't cost you any more to do this, for your dealer will undoubtedly be glad to have you convince yourself that the Columbia Engine is the one which will give you the best service thru long years of use; be the most convenient and adaptable to all your needs and cost you the least to maintain.

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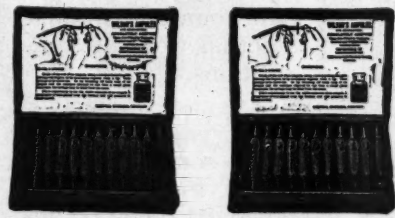
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Express Prepaid

3 boxes Ampules (12 each) \$2.25
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Actual Value \$3.25

If you have already taken advantage of this offer do not send again, your money will be returned.

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Has been used around the world for twenty years and is Time Tried and True

Price: In 1 and 2-Ounce Bottles. 1 oz., \$.60; 2 oz., \$1.00; 4 oz., \$1.80; 8 oz., \$3.00; 12 oz., \$5.40; 24 oz., \$9.60; In Hermetically Sealed Tubes. 1 Box, \$.75; 6 Boxes, \$3.75; 12 Boxes, \$6.75; 24 Boxes, \$12.00

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Professional men are more to be pitied than scorned. It is a terrible thing to have to wander about the earth as an avowed receptacle of knowledge, as a repository of facts which must be true as well as important.

The principal trouble comes in that facts are treacherous, while professional men are loyal. Although facts are changing all the time, professional men are trying to live up to their diplomas. Having once learned a set of facts, they feel it is hardly fair for knowledge to move on and leave them behind. Some of them feel this so keenly that they become obstinate and absolutely refuse to listen to

anyone with a new thought or a new fact.

Blessed is the man who does not profess too much, for he will have less to retract.—*Life*.

NO TIME WASTED

Olaf Larson, working in a millinery warehouse, backed into an elevator shaft and fell down five stories with a load of boxes. Horror-stricken, the other employes rushed down the stairs, only to find him picking himself unharmed out of the rubbish.

"Ess de boss mad?" he whispered cautiously. "Tal' 'em Ay had to come down for nails anyway."

THE TETER IMPROVED GAS APPARATUS

The Teter Improved Gas Apparatus No. 2 is the most scientifically developed and thoroughly equipped apparatus for the administration of nitrous oxid and oxygen ever invented.

There is no guess work with the Teter Apparatus. Results are absolutely sure and certain. It is the production of an anesthetist who has spent his lifetime in administering nitrous oxid and oxygen. Nitrous oxid and oxygen has been administered with the Teter Apparatus over 250,000 times.

Continued anesthesia is as easily maintained with the Apparatus and Nasal Inhaler as it is with the Apparatus and Face Inhaler.

Most Dentists are familiar with what can be done during the analgesic stage as produced with the Teter Apparatus and many are eliminating pain entirely from all their dental work by this method.

Our Vapor Warmer which is attached to the Apparatus delivers the nitrous oxid and oxygen WARM, thereby enabling the Dentist or Anesthetist to obtain a perfect and safe form of anesthesia which is not accompanied by nausea and other bad after-effects.

The Teter Gas Apparatus is being used by thousands of Dentists and is considered by them as being the greatest practice builder in their offices.

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Best results obtained only when using Teter Nitrous Oxid and Oxygen with the Teter Apparatus.

Write us for catalogue and literature, giving us at the same time the name of your dealer.

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It's Odds of 10 to 1

that the dentists who use our products,

AMMONIUM FLUORID CARBO-COPPER GRIT STRIPS METALLINE CARVING COMPOUND

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THERE IS A REASON—Write us for samples and find out, or buy them from your dealer on our guarantee. You take no gamble, it is a sure thing for you.

Our Ammonium Fluorid is a specific in all cases of Pyorrhoea. \$1.00 buys Ammonium Fluorid or Metalline.

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THE CAREFUL SHOPPER

A fashionably dressed young woman entered the post-office in a large western city, hesitated a moment and stepped up to the stamp window. The clerk looked up expectantly and she asked: "Do you sell stamps here?"

The clerk politely answered, "Yes."

"I would like to see some please," was the unusual request.

The clerk dazedly handed out a large sheet of the 2-cent variety, which the young woman carefully examined. Pointing to one near the center, she said: "I will take this one, please."—*Everybody's Magazine.*

HALCYON DAYS

"Pa, what are halcyon days?"

"Sh-h-h," replied H. Peck, Sr., as he looked around to assure himself that he and his son were alone; "they're the glorious summer days when your dear mamma is far, far away from the wicked, noisy city enjoying freedom from household cares and getting the sweet, pure air she needs so much."

A False Impression.—
"What sort of a magazine do you publish?"

"The official organ of the dentists."

"I see. A sort of mouth organ, eh?"—*Toledo Blade.*

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A Remarkable Statement

¶ If we told you we had a preparation you could insert in a tooth that made it possible for you, any time after twenty-four to forty-eight hours, to cut the tooth all to pieces without your patient feeling it—if you do not know what VELVO PHENOX is—you would probably consider us as candidates for the Ananias Club.

¶ We not only make that unqualified assertion, but we are prepared to prove it at our risk.

¶ If you will write your name on your professional card and mail it to us, we will send you, all charges prepaid, a full size package of this material and you may try it for thirty days, and at the end of that time either pay what it costs—\$1.50—or return the unused portion to us.

¶ This material positively will NOT injure pulp or gums.

¶ It is the greatest dental discovery for a generation.

¶ It means literally PAINLESS DENTISTRY.

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A High Quality Cement at Low Price

GILBERT'S VITROID CEMENT.

Comes in liberal sized packages. This all around cement has stood the time test and has a record of retaining porcelain fillings for over seventeen years, and they are still intact.

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Save Your Pulpas

They are easily saved by the use of

Pulpcap
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No, not every one, but all that are at all savable, can be restored to a normal condition with this. It comes in one pellet, which is flowed over the cavity, where it hardens in a few seconds ready for the filling.

Price per package, \$1.00

TERRIBLE DREAM

Her face is drawn, her eyes are haggard and sunken, and her expression is that of a woman on the verge of nervous prostration.

"What in the world is wrong?" asks the astonished friend. "I never saw anyone look so terribly."

"It is all because of an awful nightmare I had last night," explains the sufferer. "I simply shattered my nerves, and although I know it was merely a dream, still I can not rid myself of its effects. I dreamed I was called upon unexpectedly to plan a dinner for Dr. Wiley, Dr. Woods Hutchinson and Upton Sinclair."—*Life*.

A YOUNG GRAFTER

A small boy called on a doctor one evening.

"Say, Doc, I guess I got measles," he confided, "but no one knows it. I can keep it quiet."

* The doctor looked puzzled.

"Aw, get wise, Doc," suggested the small boy. "What'll you give me to go to school and spread it among all the kids in Indianapolis?"

Citie—"When my wife gets a cold I can cure it in a day."

Suburb—"What do you give her?"

Citie—"Nothing; I say that if she is well by night, I will take her to the theatre."

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